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*Director of Central Intelligence*

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***The Acquisition of Technology Relating to  
Weapons of Mass Destruction and Advanced  
Conventional Munitions***

***July - December 1996***

***June 1997***

### **Scope Note**

The DCI submitted this biannual report in response to a Congressionally directed action in Section 721 of the FY 1997 Intelligence Authorization Act

"(a) Not later than 6 months after the date of the enactment of this Act, and every 6 months thereafter, the Director of Central Intelligence shall submit to Congress a report on

(1) the acquisition by foreign countries during the preceding 6 months of dual-use and other technology useful for the development or production of weapons of mass destruction (including nuclear weapons, chemical weapons, and biological weapons) and advanced conventional munitions; and

(2) trends in the acquisition of such technology by such countries."

At the DCI's request, the Nonproliferation Center (NPC) drafted this report and coordinated it throughout the Intelligence Community. As directed by Section 721, subsection (b) of the Act, it is unclassified.

# THE ACQUISITION OF TECHNOLOGY RELATING TO WEAPONS OF MASS DESTRUCTION AND ADVANCED CONVENTIONAL MUNITIONS

## Contents

	Page
Introduction .....	1
Acquisition by Country:	
Egypt .....	4
India .....	4
Iran .....	4
Iraq .....	4
Libya .....	4
North Korea .....	5
Pakistan .....	5
Syria .....	5
Key Suppliers:	
China .....	5
Russia .....	5
North Korea .....	5
Germany .....	6
Trends: .....	6

## **THE ACQUISITION OF TECHNOLOGY RELATING TO WEAPONS OF MASS DESTRUCTION AND ADVANCED CONVENTIONAL MUNITIONS**

### **Introduction**

The threat from the proliferation of weapons of mass destruction and missiles is one of the highest priorities for intelligence. In the US effort to counter weapons proliferation, the Intelligence Community has taken an active role in supporting US government initiatives to strengthen export controls in supplier countries and to work with other countries to prevent the sale of weapons of mass destruction (WMD), advanced conventional weapons, and their related technologies. While it is an extremely difficult problem, US government efforts have made some progress, making both the acquisition and development of WMD more difficult and costly for proliferators.

Interdiction of WMD and the technologies necessary to acquire a WMD capability is a key component in the acquisition prevention effort. We see interdiction efforts falling into three basic categories:

- Preventing the transfer of materials through export controls and international nonproliferation regimes;
- Halting the transfer or the negotiation of transfer of materials through diplomatic and liaison initiatives;
- Seizing proscribed materials in transit, through law enforcement agencies in cooperation with the Intelligence Community.

Interdiction efforts are an extremely important part of our overall nonproliferation strategy. By themselves, however, they generally do not get countries out of the business of proliferation. They do, though, buy time for other initiatives that may be more successful in halting or rolling back a WMD program. These other initiatives can include:

- Diplomatic efforts designed to reduce the perceived need for a WMD capability;
- Education efforts to show that WMD-related funds would be better spent elsewhere;
- Bilateral or multilateral incentives. Such incentives could be financial, including membership in an international economic forum, in exchange for halting or rolling back a WMD program;
- Military assistance or security guarantees.

The US clearly leads the way in programs in all three classes of interdiction efforts. US export license applications of concern are scrutinized by a number of agencies, including the Intelligence Community. The US also is developing procedures to share appropriate end user information with key allies in an effort to strengthen our mutual export control activities. In addition, the

procedures for alerting other governments of impending transfers and tracking resulting actions are in place and working. Interdictions of shipments are occurring.

An example of a successful interdiction would be the seizure of chemical precursors destined for Libya. Although such a seizure would not halt Tripoli's aggressive chemical weapons development program, at a minimum it would:

- Slow Tripoli's ability to begin serial production of chemical agents;
- Provide the US time to persuade supplier nations or companies to halt future shipments to Libya;
- Allow the Intelligence Community and US law enforcement agencies to identify and target new intelligence sources that could contribute to rolling back Libya's CW program;
- Increase the cost to Libya of its CW development program.

Interdiction successes rest, in large measure, not on the quantity of information available to the policymaker, but on the quality. This is true for all three classes of interdictions. In licensing, for example, policymakers need unambiguous intelligence information before making a decision to deny a license, thereby denying a sale for the US company. Likewise, demarches to other governments must be accurate, or the US will be accused of crying wolf and lose support from even friendly countries. And interdictions of shipments in transit often become international incidents, and potential embarrassment if the targeted material is not found in the shipment.

Actionable intelligence in support of interdiction efforts requires more than cooperation between US intelligence, policy, and law enforcement agencies. It demands close working relationships between the United States and other foreign governments committed to halting the proliferation of WMD. Such relationships will, of course, include intelligence sharing arrangements, but equally important are diplomatic, military, and scientific exchanges at all levels.

As noted above, interdiction programs by themselves cannot halt the proliferation of WMD. Alternative suppliers and technologies, increasing use of denial and deception, and a growing ability to produce indigenously weapons or their component parts are opening new avenues to states or organizations determined to obtain a WMD capability. The increasing diffusion of modern technology through the growth of the world market is making it harder to detect illicit diversions of materials and technologies relevant to a weapons program.

We are addressing these new challenges with more aggressive efforts, which go beyond traditional cold-war efforts aimed merely at understanding weapons and associated plans. We are better integrating technical analysis with political, military, and diplomatic analysis to provide policymakers with information on the motivations that drive foreign actions and decisions, and on

influential opposition forces that could support initiatives to diminish or eliminate the proliferation threat.

Our concerns are not limited to interdicting materials and technologies to state-sponsored WMD development programs. As worrisome, in our judgment, are terrorist groups and cults that seek to acquire or develop chemical and biological weapons on their own. For example, the incidents staged in March 1995 by the Japanese cult Aum Shinrikyo demonstrate the use of WMD is no longer restricted to the battlefield. Terrorist groups and violent sub-national groups need not acquire a massive infrastructure to create a deadly arsenal. Only small quantities of precursors, available on the open market, are needed.

Interdiction efforts are further complicated by the fact that most WMD programs are based on dual-use technologies and materials that have legitimate civilian or military applications unrelated to WMD. For example, chemicals used to make nerve agents are also used to make plastics and to process foodstuffs; trade in those technologies cannot be banned.

Nonproliferation regimes provide international standards to gauge and address behavior. They provide diplomatic tools to isolate and punish violators. The past few years, many states have joined these regimes and outsiders are encountering new pressures to join. Procurement costs have risen because of the need for convoluted efforts to hide purchases. That said, these regimes can be deceived by determined proliferators. The sheer volume of international commerce, increased self-sufficiency, and the global diffusion of technology and its dual-use nature make the regimes' road ahead a difficult one. Intelligence will play an increasingly important role in maintaining their effectiveness. Protecting sources throughout this process will be a challenge.

Following are summaries by country of ACW- and WMD-related acquisition activities (solicitations, negotiations, contracts, and deliveries) that occurred between 1 July and 31 December 1996.

## **Acquisition by Country:**

*We chose to exclude countries that already have substantial ACW and WMD programs such as China and Russia, as well as countries of lower priority that demonstrated little acquisition activity of concern.*

### ***Egypt***

During the last half of 1996, Egypt obtained Scud-related ballistic missile equipment from North Korea and Russia.

### ***India***

India sought some items for its ballistic missile program during the reporting period from a variety of sources. It also sought nuclear-related items, some of which may have been intended for its nuclear weapons program.

### ***Iran***

Iran continues to be one of the most active countries seeking to acquire all types of WMD technology and advanced conventional weapons. Its efforts in the last half of 1996 have focused on acquiring production technology that will give Iran an indigenous production capability for all types of WMD. Numerous interdiction efforts by the US government have interfered with Iranian attempts to purchase arms and WMD-related goods, but Iran's acquisition efforts remain unrelenting.

For the reporting period, China and Russia have been primary sources for missile-related goods. Iran obtained the bulk of its CW equipment from China and India. Iran sought dual-use biotech equipment from Europe and Asia, ostensibly for civilian uses. Iran was actively seeking modern tanks, SAMs, and other arms from the Commonwealth of Independent States (CIS), China, and Europe. Besides some large projects with China, Iranian nuclear-related purchases were not focused on any particular countries and were only indirectly related to nuclear weapons production.

### ***Iraq***

We have not observed Iraq purchasing advanced conventional weapons or WMD-related goods, although it has purchased numerous dual-use items.

### ***Libya***

Despite the UN embargo, Libya continued to aggressively seek ballistic missile-related equipment, materials, and technology from Europe, the CIS, and the Far East. CW-related purchases diminished, however.



### ***North Korea***

North Korea's WMD programs are largely indigenous. We observed no significant procurement involving ACW or WMD-related goods.

### ***Pakistan***

Pakistan was very aggressive in seeking out equipment, material, and technology for its nuclear weapons program, with China as its principal supplier. Pakistan also sought a wide variety of nuclear-related goods from many Western nations, including the United States. China also was a major supplier to Pakistan's ballistic missile program, providing technology and assistance. Of note, Pakistan has made strong efforts to acquire an indigenous capability in missile production technologies.

### ***Syria***

Syria continued to seek CW- and Scud-related goods during the reporting period. Russia and Eastern Europe were the primary target for CW-related purchases, while North Korea and Iran have become important suppliers of Scud-related equipment and materials.

### **Key Suppliers:**

#### ***China***

During the last half of 1996, China was the most significant supplier of WMD-related goods and technology to foreign countries. The Chinese provided a tremendous variety of assistance to both Iran's and Pakistan's ballistic missile programs. China also was the primary source of nuclear-related equipment and technology to Pakistan, and a key supplier to Iran during this reporting period. Iran also obtained considerable CW-related assistance from China in the form of production equipment and technology.

#### ***Russia***

Russia supplied a variety of ballistic missile-related goods to foreign countries during the reporting period, especially to Iran. Russia was an important source for nuclear programs in Iran and, to a lesser extent, India and Pakistan. Russia also negotiated the sale of advanced weapon systems, such as the SA-10 to Cyprus, and is an important target for Middle Eastern countries seeking to upgrade and replace their existing arms.

#### ***North Korea***

North Korea continued to export Scud-related equipment and materials to countries of concern during this reporting period.

## **Germany**

Among Western nations, Germany was the favorite target for foreign WMD programs. German export controls were effective in thwarting many of these attempts, but some dual-use goods were exported, purportedly to civilian end users.

## **Trends**

Despite our efforts, countries of concern continued last year to acquire substantial amounts of WMD-related equipment, materials, and technology, as well as modern conventional weapons. China and Russia continued to be the primary suppliers, and are key to any future efforts to stem the flow of dual-use goods and modern weapons to countries of concern.

Countries determined to maintain WMD programs over the long term have been placing significant emphasis on securing their programs against interdiction and disruption. In response to broader, more effective export controls, these countries have been trying to reduce their dependence on imports by developing an indigenous production capability. Many Third World countries—with Iran being the most prominent example—are responding to Western counterproliferation efforts by relying more on legitimate commercial firms as procurement fronts and by developing more convoluted procurement networks. Should countries such as Iran ever become self-sufficient producers and exporters of WMD-related goods and conventional weapons, however, opportunities to prevent acquisition will be dramatically limited.